The young plant consists of a swollen *oblong-clavate* stem capped with the minute white pileus, which is then less than the diameter of the stem itself, but, as the pileus expands, the stem elongates and becomes more slender.

Near M. Vaillantii, *Fr.*, but the lamellae are closer and narrower, the pileus smaller, and the stem is contracted above and white at base.

16. **Boletus squamulosus,** *n. sp.*—Pileus convex, 2′–3′ across, covered with a dull red, separable, viscose pellicle—flesh soft, dull yellowish-white when freshly broken, soon turning greenish-blue and finally drying to a permanent yellow—tubes of unequal size, not large, somewhat depressed around the stem, straw color, turning greenish-blue when bruised, but, like the flesh of the pileus, becoming at length permanently yellow. Stem solid, 3′ long, ½′ thick, rather enlarged below, yellow within and at the very summit, surface covered, except the yellow summit, with a *red squamulose coat.* Resembles B. Frostii, *Rus.*, but distinguished by the color of the tubes and the different covering of the stem. Spores elliptic, about .0007′ long, one end a little bent. In dry oak and pine woods, July, August.

§ 77. Two New Fungi, by Charles H. Peck.

Lycoperdon Warnei, *Pk.*—Peridium large, three to four inches high and nearly as broad, sessile, thick, scaly, obovate, whitish; spores snuff-brown, subglobose inclining to ovate, .00025 to .0003 inch long.

Ground among nettles. Chicago. *H. L. Warne.* Of this species I have seen dried specimens only, but so far as the characters can be ascertained, it is a remarkable plant differing from all ordinary forms of Lycoperdon in its peculiarly large spores and in its singular capillitium, which is made up of membranous plates or folds rather than of filaments. It may hereafter be deemed necessary to separate it as the type of a new genus. Mr. Warne remarks that in size and shape it is not unlike a beef's heart.

Septoria Besseyi, *Pk.*—Hypophyllous; perithecia more or less abundantly scattered over the whole lower surface of the leaf, slightly prominent, at first pale ferruginous or subochraceous, then black; spores large, cylindrical, obtuse, moderately curved, usually containing several nucleoli, .0016 to .0022 inch long, about .00016 inch broad, oozing out in whitish or pinkish white masses or in short thick tendrils. Living leaves of young ash trees. Ames, Iowa. *Prof. C. E. Bessey.*

This species is doubtless closely related to *Septoria Fraxini*, but it differs so much in habit, judging from the description of that species, that I have felt constrained to consider it distinct. The upper surface of the leaf is mottled with minute yellowish spots. Both this and the preceding species are dedicated to their respective discoverers.

§ 78. New Fungi, by W. R. Gerard. No. VI.

Hysterium Cookeianum, *n. sp.*—Perithecia erumpent, and at length entirely superficial, black, not striate, linear-elongated, ends acute; lips narrow, slightly swollen, edges somewhat remote; asci